

Third Edition

ORGANIC CHEMISTRY

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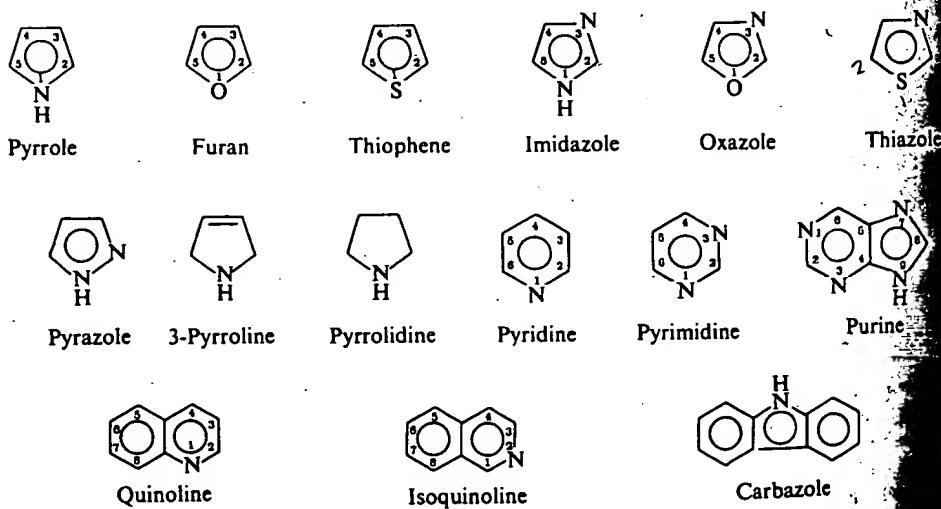
Chapter
31 | Heterocyclic
Compounds

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31.1 Heterocyclic systems

A heterocyclic compound is one that contains a ring made up of more than one kind of atom.

In most of the cyclic compounds that we have studied so far—benzene, naphthalene, cyclohexanol, cyclopentadiene—the rings are made up only of carbon atoms; such compounds are called *homocyclic* or *acyclic* compounds. But there are also rings containing, in addition to carbon, other kinds of atoms, most commonly nitrogen, oxygen, or sulfur. For example:



We notice that, in the numbering of ring positions, hetero atoms are generally given the lowest possible numbers.